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DT11 Rec'd PCT/PTO 23 JUN 2004**[SPLICING CASSETTE MANAGEMENT SYSTEM]**~~Splicing cassette management system~~

[This application is a National application claiming  
5 priority to International Application No.  
PCT/EP02/13421, filed on November 28, 2002, which  
claims priority to German Patent Application No.  
20200065.6, filed on January 3, 2002. The  
International Application was published on July 10,  
10 2003 (WO 03/056375 A2) pursuant to PCT Article 21(2) in  
the German language.]

**[Field of the Invention]**

The invention relates to a splicing cassette management  
15 system for an optical waveguide distribution cabinet—as  
~~claimed in the precharacterizing clause of claim 1.~~

**[Background of the Invention]**

Distribution cabinets are required in order to ensure  
20 structured wiring for the construction of optical  
waveguide cable networks. Splicing cassettes are  
subunits of distribution cabinets. One requirement to  
which optical waveguide distribution cabinets are  
subject is that the maximum number of components and  
25 wiring can be fitted with a high packing density.

The present-day standard for optical waveguide  
distribution cabinets is based on so-called 19-inch  
distribution cabinets with a physical depth of 600  
30 millimeters. If the physical depth of the distribution  
cabinet needs to be reduced, for example to a physical  
depth of 300 millimeters, then problems occur with the  
structured wiring, in particular with regard to  
arranging the splicing cassettes in a space-saving  
35 manner in the distribution cabinet.

Against this background, the present invention is based on the problem of providing a novel splicing cassette management system for an optical waveguide distribution cabinet, which allows structured wiring even when the physical depth of the distribution cabinet is reduced.

This problem is solved by a splicing cassette management system for an optical waveguide distribution cabinet having the features [shown and described herein] ~~of claim 1~~.

#### [Brief Description of the Drawings]

Preferred developments of the invention can be found in the dependent claims and in the following description. One exemplary embodiment will be explained in more detail with reference to the [accompanying drawings] ~~drawing~~, in which:

Figure 1 shows a perspective side view of a splicing cassette management system according to the invention for an optical waveguide distribution cabinet,

Figure 2 shows a splicing cassette management system as shown in Figure 1, with a covering flap which can be folded open,

Figure 3 shows the splicing cassette management system as shown in Figure 1 with the covering flap unfolded, with a drawer which has been withdrawn from the front face and with the splicing cassette holder raised, and

Figure 4 shows the splicing cassette management system as shown in Figure 1 with the covering flap unfolded, with the drawer withdrawn from the rear face, and with the splicing cassette holder raised.

**[Detailed Description of the Invention]**

The splicing cassette management system 10 according to the invention and as shown in Figures 1 to 4 has a housing 11, with the housing 11 being bounded by a covering flap 13 on its front face 12. In the illustrated exemplary embodiment, there is no such covering flap on a rear face 14 of the housing 11, opposite the front face 12.

10 Guide rails 17 are mounted on side walls 15, 16 of the housing 11. A mounting device 18, which is in the form of a drawer, is mounted and guided in the guide rails 17 such that it can be moved backward and forward. The mounting device 18, which is in the form of a drawer, can in this way be moved on a first plane in a direction which is predetermined by the guide rails 17, specifically parallel to a base wall 19 of the housing 11.

20 A splicing cassette holder 20 is positioned in the mounting device 18 of the splicing cassette management system 10. The splicing cassette holder 20 holds two or more splicing cassettes 21, which run approximately parallel to one another. The splicing cassette holder 20 can accordingly be moved on the first plane, together with the mounting device 18.

The mounting device 18 is in this case designed such that it can be moved out of the splicing cassette management system, together with the splicing cassette holder 20, both from the front face 12 and from the rear face 14. Figure 3 shows the splicing cassette management system 10 with the covering flap 13 folded open and with the mounting device 18 pushed out of the front face 12 of the splicing cassette management system 10. Figure 4 shows the splicing cassette

management system 10 with the mounting device 18 pushed out of its rear face.

According to the invention, the splicing cassette holder 20 can not only be moved backward and forward together with the mounting device 18 on the first plane, which runs parallel to the base wall 19 of the splicing cassette management system 10, but can also be folded from the first plane to a second plane which runs approximately at right angles to the first plane. For this purpose, the splicing cassette holder 20 has an associated pivoting device 23 on one of its faces 22. The splicing cassette holder 20 is attached to the mounting device 18 via the pivoting device 23. As can be seen in particular from Figures 3 and 4, this pivoting device 23 is associated with one side wall 24 of the mounting device 18. In order to fold the splicing cassette holder 20 from the first plane to the second plane, the splicing cassette holder 20 is pivoted through 90° about a rotation axis of the pivoting device 23 which extends approximately parallel to the side wall 24 of the mounting device 18. The side wall 24 then forms a stop and a support for the splicing cassette holder once it has been pivoted to the second plane. The pivoting device 23 is preferably in the form of a latching joint, with the splicing cassette holder 20 being pivoted to the plane of the mounting device 18 in a first latching step, and being pivoted from this first plane to the second plane in a second latching step—20.

The splicing cassette management system 10 according to the invention can be used to position the splicing cassettes 21 and the splicing cassette holder 20 in the distribution cabinet in a particularly space-saving manner. This allows high packing densities to be achieved in the optical waveguide distribution cabinet.

All that is required to access the optical waveguides that are placed in the splicing cassettes 21 is to move the splicing cassette holder 20 together with the mounting device 18 out of the housing 11 on one side of the splicing cassette management system 10, and then to pivot it to the second plane.

## List of reference symbols

- 10 Splicing cassette management system
- 11 Housing
- 12 Front face
- 13 Covering flap
- 14 Rear face
- 15 Side wall
- 16 Side wall
- 17 Guide rail
- 18 Mounting device
- 19 Base wall
- 20 Splicing cassette holder
- 21 Splicing cassette
- 22 Face
- 23 Pivoting device
- 24 Side wall

[That Which Is Claimed Is:]

## Claims

1. A splicing cassette management system for an  
5 optical waveguide distribution cabinet,  
[comprising] ~~having~~ two or more splicing cassettes ~~(21)~~  
which are arranged in a splicing cassette holder ~~(20)~~,  
~~characterized in that the splicing cassette holder (20)~~  
10 ~~is~~ mounted on a withdrawable mounting device ~~(18)~~ and  
can be moved together with the mounting device ~~(18)~~ on  
a first plane, and in that the splicing cassette holder  
~~(20)~~ can be pivoted from the first plane to a second  
plane.
- 15 2. The splicing cassette management system as claimed  
in claim 1, [wherein] ~~characterized in that~~ the second  
plane runs approximately at right angles to the first  
plane.
- 20 3. The splicing cassette management system as claimed  
in claim 1[, wherein] ~~or 2, characterized in that the~~  
withdrawable mounting device ~~(18)~~ is mounted in a  
housing ~~(11)~~ via guide rails ~~(17)~~, and in that the  
splicing cassette holder ~~(20)~~ can be withdrawn from the  
25 housing ~~(11)~~ together with the mounting device ~~(18)~~ via  
the guide rails ~~(17)~~ on two opposite sides ~~(12, 14)~~ of  
the housing (11).
4. The splicing cassette management system as claimed  
30 in claim 3, [wherein] ~~characterized in that~~ the  
mounting device ~~(18)~~ is in the form of a drawer.
5. The splicing cassette management system as claimed  
in ~~one or more of claims 1 to 4, characterized in that~~  
35 [claim 1, wherein] the splicing cassette holder ~~(20)~~  
has a pivoting device ~~(23)~~ on one of its sides ~~(22)~~, in  
which case the splicing cassette holder ~~(20)~~ is mounted

on the mounting device—~~(18)~~ via the pivoting device ~~(23)~~ and can be folded from the first plane to the second plane.

- 5 6. The splicing cassette management system as claimed in claim 5, [wherein] ~~characterized in that~~ the pivoting device—~~(23)~~ is in the form of a latching joint.



[Abstract of the Disclosure]

[The invention relates to a splicing cassette management system for an optical waveguide distribution cabinet. The splicing cassette management system includes a plurality of splicing cassettes (21), arranged in a splicing cassette holder (20). The splicing cassette holder (20) is arranged on a pull-out mounting device (18) and may be moved together with the mounting device (18) into a first plane, whereby the splicing cassette holder (20) may be rotated from the first plane into a second plane, which is approximately perpendicular to the first plane.]